## TECHNICAL REVIEW AND EVALUATION OF APPLICATION FOR AIR QUALITY PERMIT NO. 70156

## **CEMEX Construction Materials South, LLC**

#### I. INTRODUCTION

This Class II synthetic minor permit is issued to CEMEX Construction Materials South, LLC, the Permittee, for the continued operation of a portable crushing and screening plant and concrete batch plant located in Camp Verde.

## **A.** Company Information

1. Facility Name: CEMEX – Camp Verde Plant

2. Facility Location: 3600 Old Highway 279, Camp Verde, Yavapai County,

AZ 86322

3. Mailing Address: 5555 E. Van Buren Street, Suite 155, Phoenix, AZ 85008

# B. Attainment Classification

This area is designated as in attainment/unclassified for all other pollutants.

### II. PROCESS DESCRIPTION

CEMEX Construction Materials South, LLC operates a crushing and screening plant and a concrete batch plant. The facility has production limits of 5,000 tons per day of aggregate, and 3,840 cubic yards per day of concrete. The source's emissions are below the major source threshold but are taking additional limitations to meet the National Ambient Air Quality Standards (NAAQS).

The source is prohibited from operating the facility within Maricopa, Pima, and Pinal counties.

#### III. EMISSIONS

Table 1 lists both the uncontrolled and controlled potential emissions for the facility.



**Table 1: Potential Emissions** 

Pollutant	Emissions (tons per year)	
	Uncontrolled	Controlled
PM	782.29	29.03
$\mathrm{PM}_{10}$	331.34	11.81
$\mathbf{PM}_{2.5}$	49.74	1.79
СО	0.80	0.80
NOx	1.37	1.37
VOCs	0.10	0.10

# IV. APPLICABLE REGULATIONS

Table 2 displays the applicable requirements for each permitted piece of equipment along with a explanation of why the requirement is applicable.

**Table 2: Verification of Applicable Regulations** 

Unit	<b>Control Device</b>	Rule	Discussion
Crushing and Screening Equipment	Wet Suppression System	A.A.C. R19-2-722	Standards of Performance for Existing Gravel or Crushed Stone Processing Plants.
		40 CFR 60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants. It applies to crushing and screening equipment manufactured after August 31, 1983.
Concrete Batch Plants	Baghouse and Dust Collector	A.A.C R18-2-723	This rule applies to concrete batch plants which require the facility to follow the requirements in A.A.C R18-2-604 through A.A.C R18-2-607.



Unit	<b>Control Device</b>	Rule	Discussion
Propane Water Heater	None	A.A.C. R18-2-724	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment.  NESHAP Subpart JJJJJJ not applicable to gas-fired boilers. [40 CFR 63.11195(e)]
Fugitive dust sources	Water Trucks Dust Suppressants	A.A.C. R18-2 Article 6 A.A.C. R18-2-702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2-702 A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	This standard is applicable to any spray painting operation.
Demolition/renovation operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.
Mobile sources	None	A.A.C. R18-2-801	These are applicable to off- road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.

# V. PREVIOUS PERMIT CONDITIONS

Permit No. 50376 was issued on August 14, 2013, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 70156 was revised or deleted.

Table 3: Permit No. 70156

Section No.	Determination		Comments
	Revised	Delete	
Att. A.	X		General Provisions - Revised to represent most recent template language.
Att. B.I	X		Revised to add ALT-082 method for visual emission observations and surveys.
Att. B.II		X	Conditions for Hot Mix Asphalt Facility deleted as the source no longer operates HMA plant.
Att. B.III		X	Requirements for Asphalt Heater removed.
Att. B.VIII	X		Revised to remove NESHAP JJJJJJ requirements, not applicable for gas-fired boilers.
Att. B.IX		X	ICEs are present but not in use at this location. They are listed in Equipment list under Boneyard Equipment.



Att. C	X		Equipment list updated.
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### VI. MONITORING REQUIREMENTS

### **A.** Facility Wide

At the frequency specified for each applicable sections of the permit, the Permittee is required to conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources. If the plume on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date of observation, and the results of the instantaneous survey. If the plume on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the plume.

#### **B.** Crushing and Screening Plant Requirements – NSPS

- 1. The Permittee is required to conduct monthly opacity monitoring on all affected facilities to which an opacity standard applies, in accordance with either EPA Reference Method 9 or Alternative Method ALT-082.
- 2. The Permittee is required to install, calibrate, maintain, and operate monitoring devices to determine the daily process weight of sand, gravel or crushed stone produced. The weighing devices shall have an accuracy of plus or minus 5 percent over their operating range.
- 3. If wet suppression is used to control emissions from any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, the Permittee is required to perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee is required to initiate corrective action within 24 hours and complete corrective action as expediently as practical if it is found that water is not flowing properly during an inspection of the water spray nozzles

# C. Crushing and Screening Plant Requirements – Non-NSPS

- 1. The Permittee is required to conduct monthly opacity in accordance with either EPA Reference Method 9 or Alternative Method ALT-082.
- 2. The Permittee is required to install, calibrate, maintain, and operate monitoring devices to determine the daily process weight of sand, gravel or crushed stone produced. The weighing devices shall have an accuracy of plus or minus 5 percent over their operating range.

# **D.** Concrete Batch Plant Requirements

The Permittee is required to conduct monthly opacity for visible emissions from the concrete batch plant and associated baghouses in accordance with either EPA Reference Method 9 or Alternative Method ALT-082.

# **E.** Fugitive Dust

1. The Permittee is required to keep record of the dates and types of dust control



measures employed.

- 2. The Permittee is required to show compliance with the opacity standards by having a Method 9 certified observer perform monthly survey of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
- 3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
- 4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

### **F.** Periodic Activities

- 1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.
- 2. The Permittee is required to record the date, duration, quantity of paint used, any applicable SDS, and pollution control measures of any spray painting project.
- 3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

### **G.** Mobile Sources

The Permittee is required to keep records of all emission related maintenance performed on the mobile sources.

#### VII. COMPLIANCE HISTORY

There are no pending violations or compliance issues for this facility.

#### VIII. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
	National Emission Standards for Hazardous Air Pollutant
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Nominally less than 10 Micrometers
	Potential-to-Emit
TPY	